

December 16, 2013

BY COURIER & RESS

Ms. Kirsten Walli, Board Secretary,
Ontario Energy Board
Suite 2700, 2300 Yonge Street
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

Re: EB-2012-0391
Bentpath Rosedale Pool - Well Drilling Project

Further to the Report of the Board as issued on December 20, 2012 and in particular with reference to Condition of Approval 3.1 and 3.2, we now enclose Union's Interim Monitoring Report.

Sincerely,

[original signed by]

Mary Jane Patrick
Administrative Analyst, Regulatory Projects
:mjp
Encl.

cc: Ms. Pascale Duguay, Manager Natural Gas Applications
Wendy Sullivan, MNR

2013 BENTPATH ROSEDALE PROJECT INTERIM MONITORING REPORT

Prepared by: Union Gas Limited
Environmental Planning
December 2013

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2013 Bentpath-Rosedale Project Interim Monitoring Report

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1.0 INTRODUCTION

This Interim Monitoring Report is provided in compliance with the Ontario Energy Board (“Board”) Order EB-2012-0391 granting Union Gas Limited (Union) approval of the Well Drilling Application on December 20, 2012, for the drilling of one observation well, Union Bentpath 13, Dawn 8-32-V located on Lot 32, Concession V, in the Township of Dawn-Euphemia.

The Project included drilling a new A2 Unit observation well (Union Bentpath 13) in the Bentpath Pool. The new well will be used to monitor the pressure changes in the A2 Unit and other shallower formations during the proposed delta pressuring.

The requirements for and details of this report are outlined in the specific Conditions of Approval issued by the Board in its Order EB-2012-0391 dated December 20, 2012 as listed below. The Conditions of Approval can be found in Appendix “B”.

Accordingly, the purpose of this Interim Monitoring Report is to fulfill these conditions.

1.0 Condition 1.1

Union Gas Limited (“Union”) shall rely on the evidence filed with the Board in EB-2012-0391 proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed well.

2.0 Condition 2.1

Union shall construct the facilities and restore the land in accordance with its Application and evidence given to the Board, except as modified by this Order and these Conditions of Approval

Condition 2.2

Union shall ensure that the movement of equipment is carried out in compliance with all procedures and plans filed with the Board, and as follows:

- i) *Union shall make reasonable efforts to keep the affected landowner as well as adjacent landowners and their representative tenant farmers, or their designated representatives, informed of its plans and construction activities; and*
- ii) *the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.*

Condition 2.3

Union shall, subject to the recommendation by an independent tile contractor and subject to the landowners approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.

Condition 3.1

Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.

Condition 3.2

The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

2.0 BACKGROUND

Construction was initiated in November 2012 with topsoil stripping, the installation of new permanent roads and pads and the installation of pre-construction fencing. The Ministry of Natural Resources Well Drilling Licences were released on January 9, 2013. Drilling began on January 29, 2013 and was completed on April 1, 2013. The well was placed into service on June 24, 2013. Cleanup began on November 7, 2013 with the reduction of the temporary well pads to their permanent configuration including the removal of gravel and geotechnical material followed by disking of the soils in preparation for seeding in the spring of 2014.

Union will return to the right-of-way in spring 2014 to complete the following activities: repair any subsidence on the right-of-way, seed all disturbed areas, perform a general overview of the right-of-way and complete any additional clean-up that may be required.

3.0 POTENTIAL IMPACTS AND MITIGATION

3.1 Condition 1.1

Union Gas Limited ("Union") shall rely on the evidence filed with the Board in EB-2012-0391 proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed well.

Union has adhered to all evidence filed with the Board and has complied with all applicable laws, regulations and codes pertaining to the construction of the well.

3.2 Condition 2.1

Union shall construct the facilities and restore the land in accordance with its Application and evidence given to the Board, except as modified by this Order and these Conditions of Approval

Union has constructed the facilities according to the evidence filed in support of its application and in accordance with all mitigation measures as identified in Schedule 13 of the evidence.

3.3 Condition 2.2

Union shall ensure that the movement of equipment is carried out in compliance with all procedures and plans filed with the Board, and as follows:

- i) Union shall make reasonable efforts to keep the affected landowner as well as adjacent landowners and their representative tenant farmers, or their designated representatives, informed of its plans and construction activities; and*
 - ii) the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.*
- i) Prior to any activity associated with the development, the Lands Agent met with the landowners to discuss and identify any concerns.*

The Lands Agent was available during construction to answer questions and address concerns through the Landowner Relations Program.

- ii) After meeting with the landowners and reviewing their needs, the facilities were located so as to serve the requirements of Union and minimize any inconvenience to farming operations.*

All well work was completed on gravel pads with travel to the well restricted to gravel roadways. This allowed all weather access to the well locations with no additional impact to adjacent lands.

3.4 Condition 2.3

Union shall, subject to the recommendation by an independent tile contractor and subject to the landowners approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.

The agricultural land use prior to construction was pasture with no systematic drainage system. No pre-construction or post construction tiling was required.

3.5 Condition 3.1

Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.

3.5.1 Report Circulation

Four (4) copies of this Interim Monitoring Report are provided to the Board.

3.5.2 Landowner Concerns

To date there have been no outstanding comments or complaints entered into Union's complaint tracking system. Union will continue to monitor the state of the land and the environment and will address any additional landowner concerns, if they should arise.

Union will ensure that the landowner is provided access to a Union Gas representative during operations of the facilities.

3.6 Condition 3.2

The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

In fulfilment of Condition 3.2, Table 1 summarizes the construction effects and general mitigation measures carried out during construction.

3.6.1 Monitoring Programs

3.6.1.1 Water Well Monitoring

Union retained the services of Dillon Consulting to undertake an independent water well survey and monitoring program. Prior to the commencement of the well construction, residents located within 1.5 km of the proposed work were notified of the water well monitoring program.

On January 21 & 22, 2013 water samples from five (5) residential wells were collected and compared with the Ministry of the Environment (MOE) Ontario Drinking Water Quality Standards (ODWQS). The results of the testing were provided to the landowners.

3.6.1.2 Soil Testing

Prior to construction, Union Gas conducted soil sampling in the agricultural fields associated with the project for the presence of Soybean Cyst Nematodes. The nematode is a microscopic worm-like organism found in soils that obtain their nutrients by feeding on the root systems of soybeans. Results indicated that Soybean Cyst Nematodes were not present on the agricultural properties impacted by construction.

3.6.1.3 Archaeological Monitoring

Union retained the services of D.R. Poulton and Associates to conduct a Stage 1 and Stage 2 archaeological assessment prior to construction in accordance with the Ministry of Tourism, Culture and Sport guidelines to identify potential archaeological sites. The survey was conducted on September 21, 2012 with no cultural resources discovered.

3.6.1.4 Species At Risk (SAR)

A SAR screening was undertaken within a 1 kilometer radius of the well location with six (6) protected SAR or their habitat having the potential to be present or near the study area, the most likely of which were the Butler's Gartersnake and the Eastern Fox Snake. All personnel related to the project were briefed on species identification and Union Gas reporting procedures, in order to maintain compliance with provincial legislation.

4.0 SUMMARY

This Interim Monitoring Report has been prepared as per conditions in the Board Order EB-2012-0391. The report provides an outline of Union's compliance with the commitments of its pre-filed evidence, the measures implemented during construction to minimize disturbance to the environment and a description of Union's monitoring programs. It is anticipated that these measures will effectively eliminate any long-term impacts to the environment.

A review of the work area will be undertaken in the spring of 2014 to determine if any additional clean-up is required. Should additional clean-up be required, it will be completed as soon as conditions reasonably allow.

“Table 1”

Potential Impacts and Mitigation Measures

**TABLE 1: MITIGATION SUMMARY
WELL DRILLING**

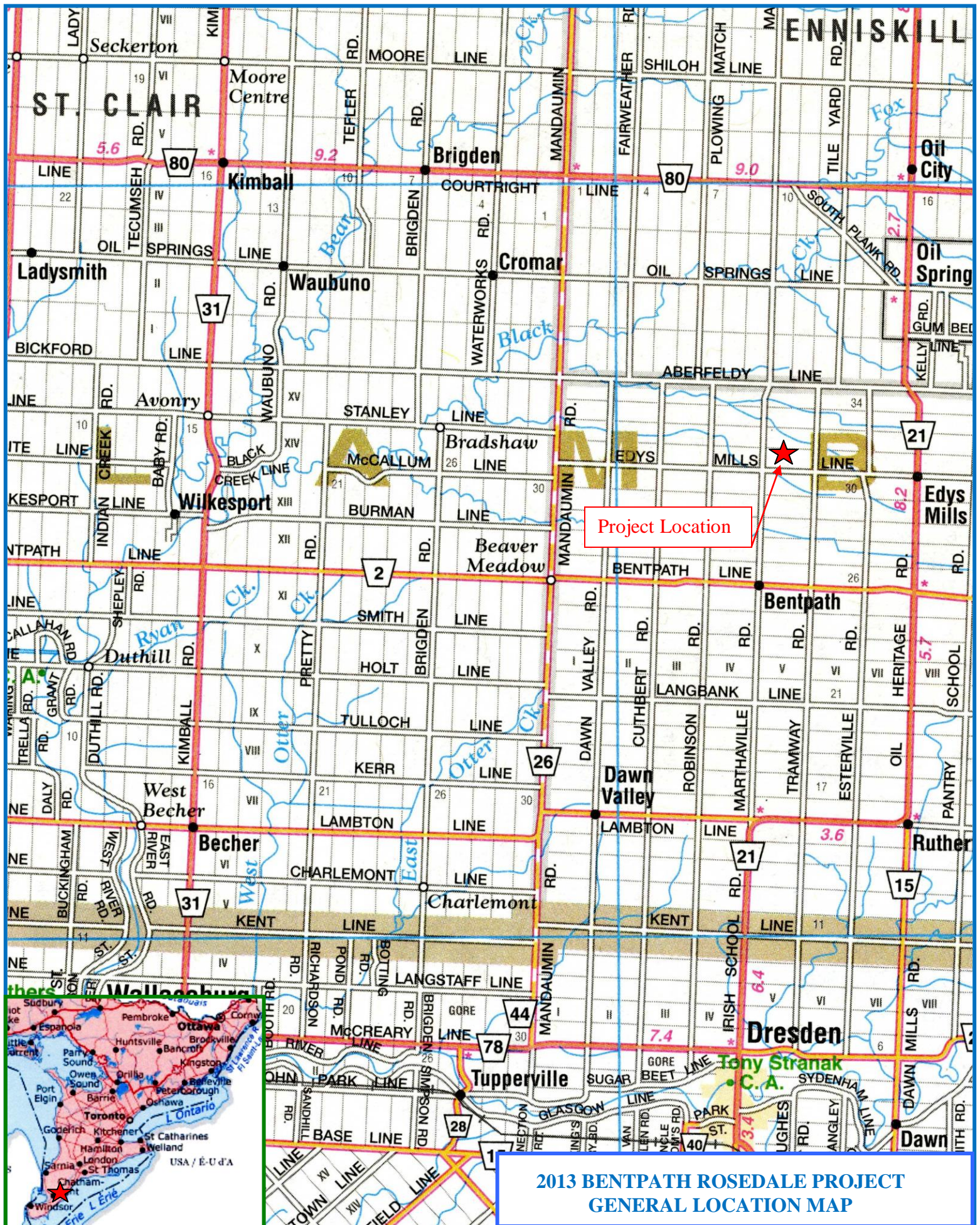
Activity	Potential Impact	Mitigation
a) Pre-Construction	Ancillary facilities such as wellheads and access roads may be an inconvenience to landowners and farming operations.	<ul style="list-style-type: none"> • Prior to any activity associated with the development, the Lands Agent met with the directly affected landowners and reviewed items such as the drilling schedule, as well as the location of the wellheads and the permanent access roads. The facilities were located so as to minimize any inconvenience to the farming operation.
b) Surveying	Surveying may be disruptive to the landowner.	<ul style="list-style-type: none"> • The landowners were notified of intent to enter the property.
c) Access Roads	Vehicular traffic during and after drilling (i.e. Well operations and maintenance vehicles) may cause soil rutting compaction or mixing, particularly if soils are wet.	<ul style="list-style-type: none"> • The location of the access roads was reviewed with the landowners. Roads were constructed in such a way as to minimize disruption to farm operations. • Existing laneways were utilized where possible. • Access roads and granular work areas were limited in size to the greatest extent possible. • All traffic was limited to the access roads or granular work area greatest extent possible. • Geotextile fabric was used for access roads and work areas to provide additional stability, minimize compaction and eliminate soil mixing with granular material.
d) Grading	Grading will be necessary for the construction of access roads and drilling work areas. On agricultural land, grading has the potential to impact soil productivity by disrupting tile drains and causing soil mixing, rutting and compaction, particularly during wet soil conditions.	<ul style="list-style-type: none"> • No systematic tiling system was present. • Grading was conducted on wet soils. Wet soils shutdown practices were adhered to. • In drilling work areas where land was returned to its former use (agricultural), topsoil was stripped and stockpiled along the edges of the work area following documented Company procedures. • An Environmental Inspector was on site at a regular basis to observe operations such as topsoil stripping, trenching, dewatering and any other procedures that may have had an impact to the environment.

TABLE 1: MITIGATION SUMMARY (Continued)

Activity	Potential Impact	Mitigation
e) Noise	Noise from the drilling rig or service vehicles may disrupt nearby residents.	<ul style="list-style-type: none"> Noise was controlled to the greatest extent possible so as to minimize the disruption to nearby residents. All equipment was properly muffled.
f) Site Restoration	Improper site restoration may permanently affect soil productivity.	<ul style="list-style-type: none"> Areas disrupted by drilling were restored by re-grading followed by chisel ploughing and disking. The Lands Agent reviewed and discussed site restoration measures with the landowner prior to implementation, to obtain any concerns or suggestions with regard to these measures. Upon completion the Lands Agent reviewed the area with the landowner to ensure restoration has been completed to the landowner's satisfaction.
g) Fuel Storage and Handling	Improper fuel storage and handling may cause spillage and possible contamination of soil.	<ul style="list-style-type: none"> Fuel was not stored near watercourses (i.e. Within 50 metres). Fuel storage areas were clearly marked. Containment dykes and protective plastic ground matting were used in fuel storage areas to protect against spillage and leakage. Spill clean-up materials were stored on site and available in the event of a spill.
h) Liquid and Solid Waste	Drilling fluids, solid wastes and lubricants must be properly handled, stored and disposed of so as to avoid the possible contamination of surrounding soil or water.	<ul style="list-style-type: none"> Liquid and solid wastes were properly stored, handled and disposed of in an approved location. The drilling area remained clear of debris and litter during and after drilling. Drilling fluids were properly contained in waste tanks and disposed of after drilling in an appropriate location. The level of drilling fluids was frequently monitored to avoid possible overflow of the tank.
i) Landowner Concerns	Disruption to landowners and tenants.	<ul style="list-style-type: none"> Union Gas provided the landowners with the telephone numbers of Company personnel. A Landowner Relations Program was established to track complaints during construction.
j) Road Side Ditches	Water quality concerns.	<ul style="list-style-type: none"> Ensured ditches were returned to pre-construction condition or better, as quickly as possible.

“Appendix A”






Location Map



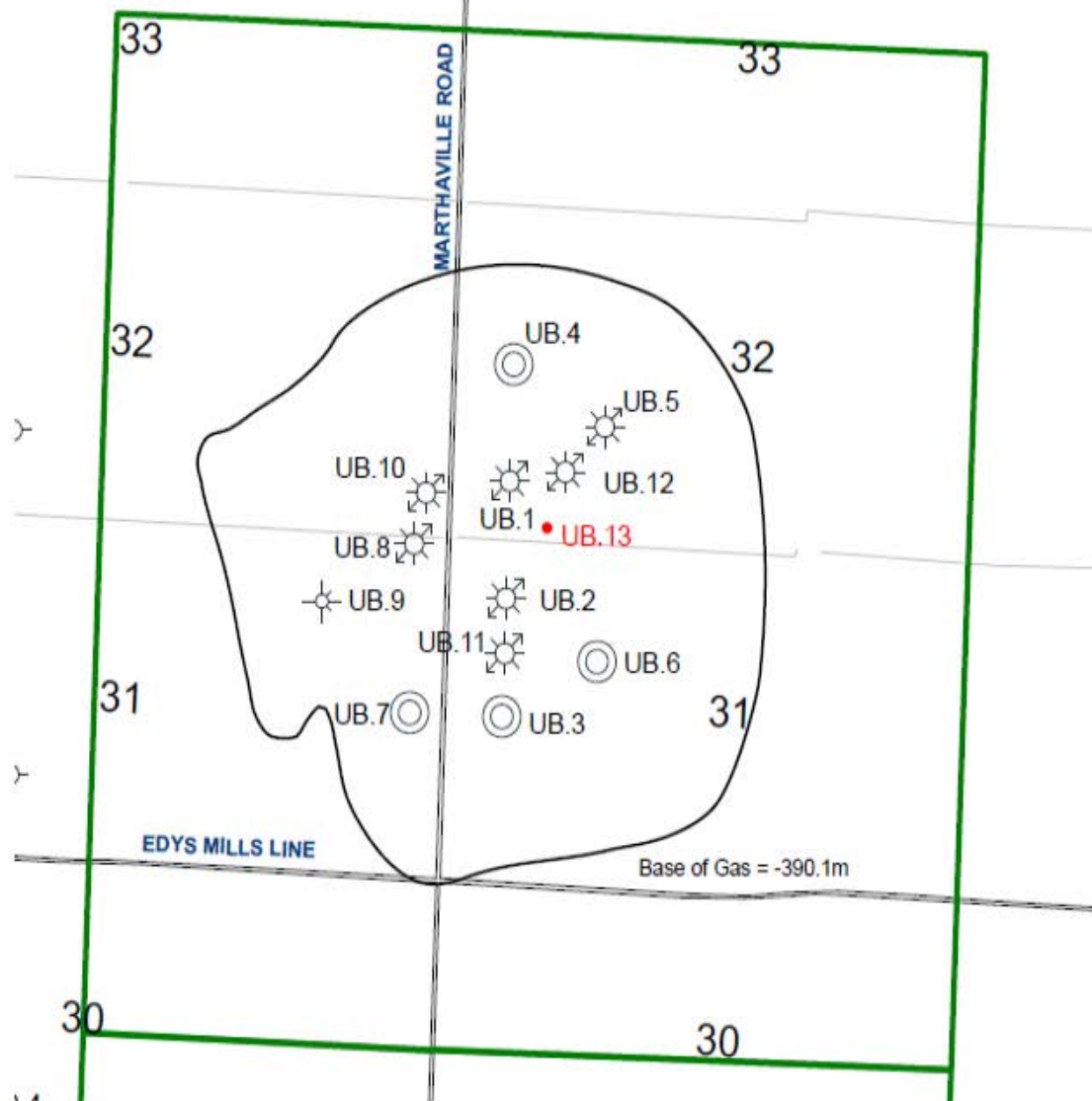
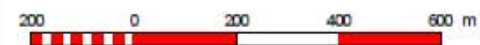
BENTPATH



LEGEND

-  Injection/Withdraw Well
-  Observation Well
-  Proposed Well
-  Base of Gas
-  DSA - Union Gas

SCALE

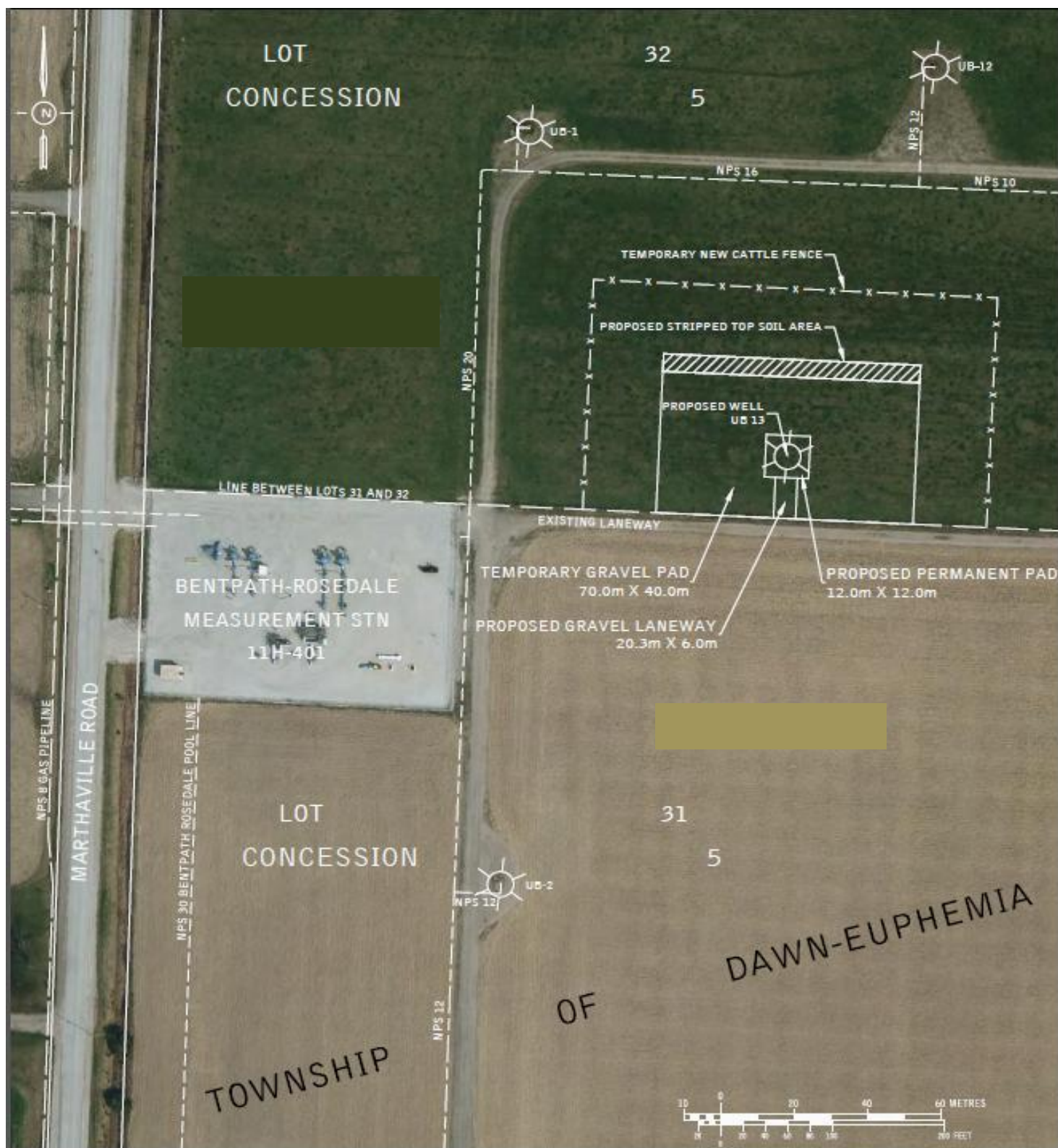


REMARKS

UNION GAS LIMITED

Bentpath Pool
Location Map

Drawn by: SC Date: 2012 2012 As Shown
Revised by: SC Date: 2012 2012 As Shown



REVISIONS

NO.	DATE	BY	APP'D	REMARKS



uniongas

A Spectra Energy Company

2013 BENTPATH ROSEDALE PROJECT TOWNSHIP OF DAWN-EUPHEMIA SITE PLAN - MAP 3

DRAWN BY	K.W. GUERIN	DATE	2012/09/13	SCALE	1:1500	PLOT SPEC.	1=1.5
CHECKED BY		DATE		AC/DRAW CODE	M797- SITE PLAN		
APPROVED BY		DATE		JOB NO.			
SIZE	A	DRAWER	N/A	SHEET	1 of 1	DRAWING NO.	M797

“Appendix B”

Conditions of Approval

**Union Gas Limited
EB-2012-0391**

Conditions of Approval

Well Drilling Licence

1. General Requirements

- 1.1. Union Gas Limited ("Union") shall rely on the evidence filed with the Board in EB-2012-0391 proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed well.
- 1.2. Authorization for the issuance of the drilling licence is limited to twelve months from the date of the Board's Report to the Ministry of Natural Resources.
- 1.3. The authority granted under this Order to Union is not transferable to another party without leave of the Board. For the purpose of this Condition, another party is any party except Union Gas Limited.

2. Construction Requirements

- 2.1. Union shall construct the facilities and restore the land in accordance with its Application and evidence given to the Board, except as modified by this Order and these Conditions of Approval.
- 2.2. Union shall ensure that the movement of equipment is carried out in compliance with all procedures filed with the Board, and as follows:
 - i) Union shall make reasonable efforts to keep the affected landowner as well as adjacent landowners and their respective tenant farmers, or their designated representatives, informed of its plans and construction activities; and
 - ii) the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.
- 2.3. Union shall, subject to the recommendation by an independent tile contractor and subject to the landowners approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.

- i) Union shall make reasonable efforts to keep any affected landowner, as well as adjacent landowners and their respective tenant farmers, or their designated representatives, informed of its plans and construction activities; and
 - ii) the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.
- 3.3 Union shall, subject to the recommendation of an independent tile contractor and subject to the landowners' approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.
- 3.4 Union shall implement all the recommendations identified in Schedule 11 of the pre-filed evidence.
- 4 Monitoring and Reporting Requirements
- 4.1 Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board and the Ministry of Natural Resources. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all comments and complaints to the interim and final monitoring reports. The log shall record the times of all comments and complaints received, the substance of each comment and complaint, the actions taken in response, and the reasons underlying such actions.
- 4.2 The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 4.3 The final monitoring report shall describe the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the

monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

5 Other Requirements

- 5.1 For the purposes of these conditions conformity of the Applicant with CSA 341.1-02 shall be to the satisfaction of the Ministry of Natural Resources.
- 5.2 Union shall designate one of its employees as project manager who will be responsible for the fulfilment of these conditions, and shall provide the employee's name to the Ministry of Natural Resources, the Board and to all appropriate landowners.
- 5.3 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities.